A3 Amendment Three to Paths to a Sustainable Region

The Boston Region Metropolitan Planning Organization's Long-Range Transportation Plan

November 7, 2013

OVERVIEW

The Boston Region Metropolitan Planning Organization (MPO) adopted its current Long-Range Transportation Plan (LRTP), *Paths to a Sustainable Region*, in September 2011. Two amendments to *Paths to a Sustainable Region* also were adopted, one on June 28, 2012 and the second on July 25, 2013. The MPO is proposing a third amendment to the LRTP, which is explained in this document.

The primary reason for Amendment Three is to include in the LRTP two projects receiving federal funds—one from the Federal Highway Administration and the other from the Federal Railroad Administration—for projects to be designed and constructed in the Boston Region MPO. This Amendment will provide consistency between the LRTP and the Federal Fiscal Years 2014–17 Transportation Improvement Program.

These two projects are not part of the MPO's target funds. The Federal Highway Administration requires that projects that cost more than $10,000,000 and use federal funds be included in the LRTP. The two projects being added to the LRTP are:

1. *Connect Historic Boston*, funded through the Federal Highway Administration, an initiative between the National Park Service and the City of Boston Transportation Department to promote improved access for visitors and workers in the downtown historic area.
2. *South Station Expansion and Layover Facility* in Boston, funded through the Federal Railroad Administration, for the planning and preliminary design of the project

This Amendment includes a description of each project and an updated Table 1 – *Major Infrastructure and Expansion Projects Programmed with Highway Funding in the Recommended Plan of the LRTP Amendment Three, with Costs*. Table 1 adds the two projects along with the total non-MPO costs.

TABLE 1
MAJOR INFRASTRUCTURE AND EXPANSION PROJECTS PROGRAMMED WITH HIGHWAY FUNDING IN THE RECOMMENDED PLAN OF THE LRTP AMENDMENT THREE, WITH COSTS

PROJECTS	CURRENT COST (2013)	2013–2015	2016–2020	2021–2025	2026–2030	2031–2035	MPO FUNDING	NON-MPO FUNDING*
ONGOING NO-BUILD HIGHWAY PROJECTS								
Route 128 Additional Lanes (Randolph to Wellesley)**	$151,333,710	$84,872,189	$47,461,521				$132,333,710	$19,000,000
Crosby's Corner (Concord & Lincoln)**	$22,471,587	$22,471,587					$22,471,587	
RECOMMENDED HIGHWAY PROJECTS								
Middlesex Turnpike Improvements, Phase III (Bedford, Burlington, & Billerica)*	$22,691,442		$21,691,442				$21,691,442	$1,000,000
Rantoul St. (Beverly)	$15,748,820	$15,748,820					$15,748,820	
Sullivan Sq./Rutherford Ave. (Boston)*	$94,000,000		$103,562,290				$103,562,290	$15,377,710
Commonwealth Ave. (Boston)*	$16,866,250	$12,446,852					$12,446,852	$4,419,398
Connect Historic Boston (Boston)*		**$23,043,700**						**$23,043,700**
I-93/Route 3 Interchange – Braintree Split (Braintree)	$36,000,000					$85,320,000	$85,320,000	n/a

cont.

TABLE 1 (CONT.)
MAJOR INFRASTRUCTURE AND EXPANSION PROJECTS PROGRAMMED WITH HIGHWAY FUNDING IN THE RECOMMENDED PLAN OF THE LRTP AMENDMENT THREE, WITH COSTS

PROJECTS	CURRENT COST (2013)	2013–2015	2016–2020	2021–2025	2026–2030	2031–2035	MPO FUNDING	NON-MPO FUNDING*
RECOMMENDED HIGHWAY PROJECTS (CONT.)								
I-93/I-95 Interchange (Canton)*	$190,000,000		$190,000,000					$190,000,000
I-95 Northbound/Dedham St. Ramp/Dedham St. Corridor (Canton)*	$38,000,000	$38,000,000						$38,000,000
I-95 Interchange (Blue Hill Drive)*	$5,000,000	$5,000,000						$5,000,000
I-95 Interchange (Canton St./University Ave.)*	$5,000,000	$5,000,000						$5,000,000
Bruce Freeman Rail Trail (Concord to Westford)*	$17,769,600	$11,088,000	$6,681,600					$17,769,600
Route 126/Route 135 Grade Separation (Framingham)	$58,500,000				$113,950,000		$113,950,000	
Route 53 Final Phase (Hanover)	$1,170,881	$1,170,881					$1,170,881	
Assabet River Rail Trail (Hudson to Acton)*	$18,100,000	$4,714,428	$16,285,600				$16,285,600	$4,714,428

cont.

TABLE 1 (CONT.)
MAJOR INFRASTRUCTURE AND EXPANSION PROJECTS PROGRAMMED WITH HIGHWAY FUNDING IN THE RECOMMENDED PLAN OF THE LRTP AMENDMENT THREE, WITH COSTS

PROJECTS	CURRENT COST (2013)	2013–2015	2016–2020	2021–2025	2026–2030	2031–2035	MPO FUNDING	NON-MPO FUNDING*
RECOMMENDED HIGHWAY PROJECTS (CONTINUED)								
Route 1 Improvements (Malden, Revere, Saugus)	$175,196,000					$415,200,000	$415,200,000	
Route 109 (Medway)	$11,275,569		$11,275,569				$11,275,569	
Needham St./Highland Ave./Winchester St. (Newton & Needham)	$21,390,000			$31,662,400			$31,662,400	
I-93/I-95 Interchange (Reading, Stoneham, Wakefield, & Woburn)	$320,000,000				$576,302,000		$576,302,000	
Bridge St. (Salem)	$11,223,250		$14,769,000				$14,769,000	
Route 18 Capacity Improvements (Weymouth)*	$40,630,000	$10,079,388	$15,778,852				$25,858,240	$14,771,760
Montvale Ave. (Woburn)	$4,752,838		$4,752,838				$4,752,838	
New Boston St. Bridge (Woburn)	$8,297,198		$10,094,800				$10,094,800	
Conley Haul Rd. (Boston)*	$25,000,000	$25,000,000					$0	$25,000,000

cont.

TABLE 1 (CONT.)
MAJOR INFRASTRUCTURE AND EXPANSION PROJECTS PROGRAMMED WITH HIGHWAY FUNDING IN THE RECOMMENDED PLAN OF THE LRTP AMENDMENT THREE, WITH COSTS

PROJECTS	CURRENT COST (2013)	2013–2015	2016–2020	2021–2025	2026–2030	2031–2035	MPO FUNDING	NON-MPO FUNDING*
RECOMMENDED HIGHWAY PROGRAM								
Clean Air and Mobility Program (Regionwide)	$2,000,000 per yr	$1,871,994	$7,129,870	$12,680,000	$14,700,000	$17,039,000	$53,420,864	
RECOMMENDED TRANSIT PROJECT USING HIGHWAY FUNDING								
Green Line Extension from Medford Hillside (College Ave.) to Mystic Valley Pkwy. (Rte. 16)	$140,608,000		$186,900,000	$3,200,000			$190,100,000	
South Station Expansion and Layover Facility (Boston) *		**$43,000,000**						**$43,000,000**
Project Total	n/a	$148,661,711	$439,701,782	$47,542,400	$704,952,000	$517,559,000	$1,858,416,893	$406,096,596
Available Revenue		$229,830,000	$557,469,000	$815,610,000	$1,018,440,000	$1,180,650,000	$3,801,999,000	
Percentage of Program Funding		65%	79%	6%	69%	44%	49%	

* Non-MPO Funding includes earmarks, with the exception of the:
- Route 128 Bridge funding
- Middlesex Turnpike partial funding from the Northern Middlesex Council of Governments
- Bruce Freeman Rail Trail partial funding with Statewide Transportation Enhancement funds and Statewide Congestion Mitigation and Air Quality (CMAQ) funds
- Assabet River Rail Trail partial funding with Statewide CMAQ funds
- The I-95/I-93 Interchange project in Canton will be funded with non-federal aid funds
- Conley Haul Road (Boston), which will be paid for by the Massachusetts Port Authority
- Connect Historic Boston will be funded with a Transportation Investment Generating Economic Recovery grant (TIGER)
- South Station Expansion and Layover Facility will be funded with a Federal Railroad Administration grant in the High Speed Intercity Passenger Rail Program

**Current cost is the remaining cost to complete project.

Dark blue, bold items are additional projects Yellow number indicates cost adjustment to total.

BOSTON: CONNECT HISTORIC BOSTON ($23,043,700)

Connect Historic Boston is an initiative between the National Park Service and the Boston Transportation Department to promote improved access for visitors and workers in the downtown historic area. The City of Boston was selected to receive a $15.5-million Transportation Investment Generating Economic Recovery grant (TIGER discretionary) funded by the US Department of Transportation. The City will provide a match of $5,326,300 for construction costs and contribute an additional $2,193,700 for the design and construction management services costs.

This program proposes upgrades to the built environments along the streets, sidewalks, and bridges that link transit stations to parks and other destinations. It also explores new tools for wayfinding including digital applications, traditional maps, and navigational markers in the landscape such as architecture, art, sound, and signage. Boston is building a coalition of partners comprised of historic sites, advocates for walking and biking, neighborhood associations, and government agencies that will help promote the Connect Historic Boston initiative as the way to get around downtown Boston.

This initiative has an extensive advisory and inter-agency group with representatives from neighborhood councils, advocacy groups, nonprofits, as well as federal, state, and local government representatives. During the past-12 months, this project team has developed engineering drawings for safety and navigational improvements; and worked with local businesses, neighborhood councils, and the nonprofits that manage the City's historic sites and buildings to develop detailed designs and launch outreach programs. Outreach programs that support the project include an elementary school based-curriculum linking historic sites via the Silver Line, walks and rides, and a public arts competition.

Funding for this program will be used to reconstruct a system of paths and sidewalks that bring people to and from Boston's historic sites. Designs are ready for four major projects:

Connect Historic Boston Bike Trail: Boston is committed to providing safe and accessible streets for cyclists. Last year in Boston, ninety bicycle wayfinding signs were installed at busy intersections to ensure that cyclists can find the safest and most direct routes to popular sites in the City. In 2012, the Hubway Bike Share program recorded more than 530,000 rides. Improvements to Staniford, Causeway and Commercial streets will be implemented with separated bicycle lanes, space for group travel, bidirectional routes, and wayfinding to park sites. When complete, the trail will create a high-quality, family-friendly bicycle facility with connections to regional and local paths.

Constitution Road: Constitution Road—the primary entrance to the Charlestown Navy Yard, a National Park Service site, and home to new residential, commercial, and medical facilities—will be transformed into a welcoming, multimodal street, with sufficient space for pedestrians and bicycles. A wider sidewalk and a two-way, sidewalk-level, cycle track will create a new route for local residents, visitors, and commuters originating from North Station and downtown Boston.

The Blackstone Block: The Blackstone Block, America's most intact colonial street network, will be reinvigorated to feature a curbless, accessible, and shared street environment. By investing in the infrastructure of these blocks, the new pedestrian network will better link Haymarket Station to Faneuil Hall and the National Park Service Visitor Center, and make new development opportunities more viable.

Joy Street: The African American National Historic Site and Black Heritage Trail are minutes away from busy transit stops and bicycle routes, but are dominated by vehicular traffic. A prominent pedestrian entrance to the African American National Historic Site at Joy and Cambridge Streets, along with a curbless streetscape, will facilitate shared use and strengthen accessible routes into the neighborhood.

MAP 1: BOSTON: CONNECT HISTORIC BOSTON

BOSTON: SOUTH STATION EXPANSION AND LAYOVER FACILITY PROJECT ($43,000,000)

The Massachusetts Department of Transportation (MassDOT) is planning the expansion of South Station and its layover facility in Boston. MassDOT received federal funding from the Federal Railroad Administration for the project's plan and design. The funding will cover the necessary environmental review as well as the preliminary engineering work (approximately 30% design) required for the station's successful expansion and developing a new supporting rail yard.

MassDOT is studying several alternatives for expanding South Station—each with variations in track and signal systems, architecture of public spaces, and mechanics of train movements in and out of the station. The four alternatives under consideration are as follows:

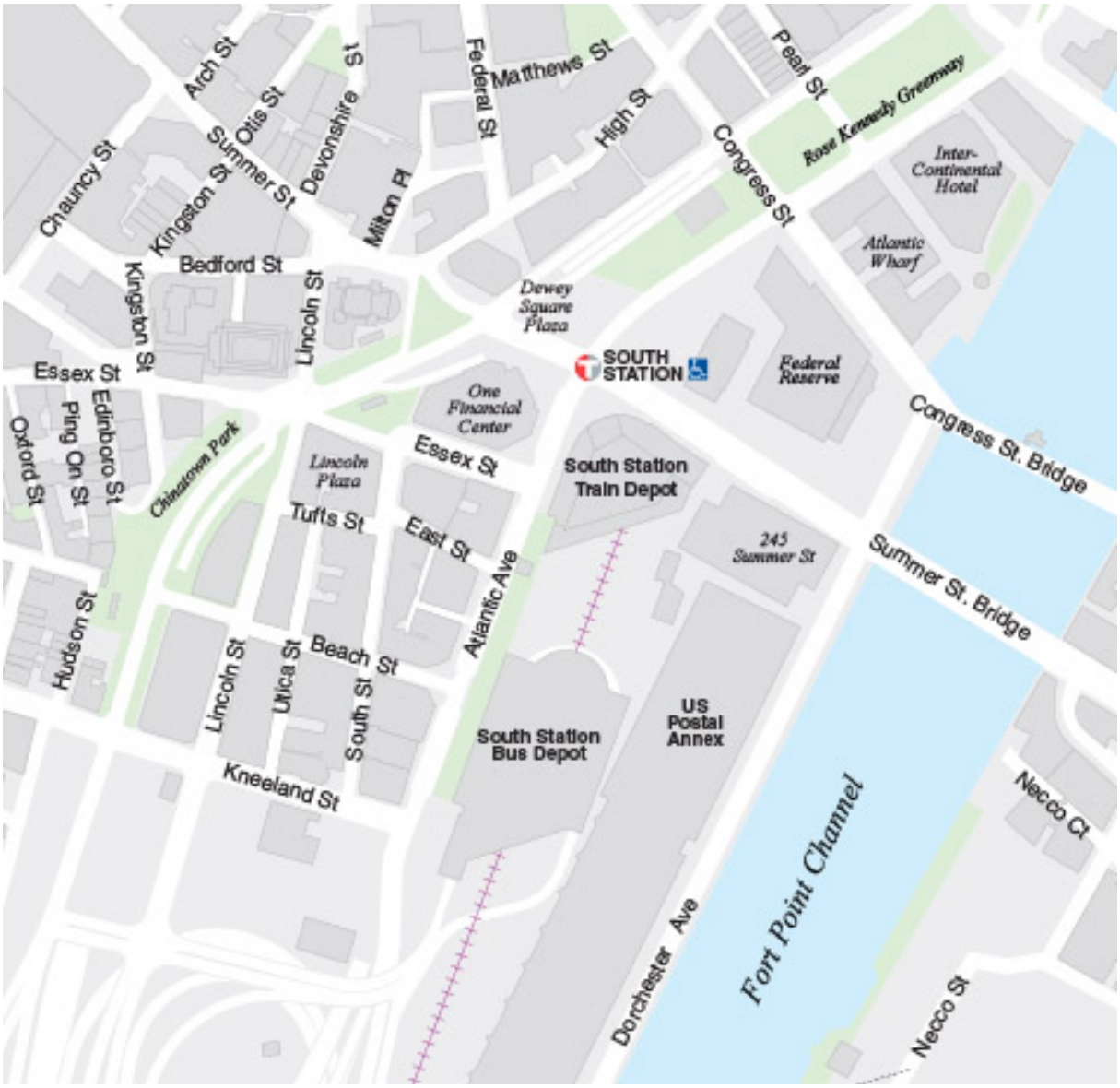
1. **The Future No-Build Alternative** assumes that the current South Station facilities remain in place; that a proposed office/residential complex has been built above South Station (separate from the South Station Expansion project); and that improvements have been made to the existing bus terminal. This alternative is used to compare the build alternatives to a base case in order to analyze the benefits and drawbacks of the various build scenarios.
2. **The Future Build Alternative 1** includes expanding the South Station tracks, platforms, concourse, and passenger facilities on the adjacent US Postal Service property. It also includes a re-opened Dorchester Avenue and an additional off-site vehicle layover space.
3. **The Future Build Alternatives 2 and 3** include expanding all of the station facilities incorporated in Future Build Alternative 1; a re-opened Dorchester Avenue; off-site layover facilities; and providing for different types/sizes of potential developments over and around the expanded station.

The South Station Expansion project aims to bring the facility current with today's demands; accommodate future service enhancements; and improve safety, comfort, convenience, and accessibility for passengers. Among the key improvements are:

- **More tracks** will improve existing high-speed and inter-city service in and out of Boston and accommodate growth
- **Improved infrastructure** will allow more efficient and flexible train movements into and out of the station, reducing delays caused by congestion
- **More train storage space** will prevent not-in-service trains from clogging South Station tracks
- **More platforms** with multiple access points will decrease passenger congestion and improve safety and accessibility
- **More amenities** will improve the customer experience
- **More signs, interactive kiosks, and clearly defined pathways** will enhance mobility and create a pleasant customer experience

The project also includes layover yards, located close to major rail stations, where trains are stored, serviced, and inspected during off-peak periods. Currently, the Massachusetts Bay Transportation Authority (MBTA) and Amtrak each have their own layover facilities near South Station, but they are cramped and provide few options for expansion as passenger service grows. Also, the lack of adequate midday layover space can cause delays and inefficiencies. To address this problem, MassDOT is completing a multi-step process to:

- Identify the requirements for layover space
- Identify sites within a reasonable distance of South Station with the potential to meet current and future needs
- Study and evaluate the identified sites as part of the environmental review process
- Detail the evaluation process in the Draft Environmental Impact Report

MAP 2: BOSTON:

SOUTH STATION EXPANSION AND LAYOVER FACILITY PROJECT